

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : FILZYM 230
Product code : LIQ1186

1.2. Relevant identified uses of the substance or mixture and uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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Springboro, - OH 45066 - United States of America
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info@realzyme.com - www.realzyme.com

1.4. Emergency telephone number

Emergency number : +1- 800 - 222 - 1222 (United States only) 011-32-70-245-245 (Canada and all other areas)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Serious eye damage/eye irritation, Category 1 H318

Full text of H statements : see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) : Danger
Contains : Alkyl polyglucoside C10-16
Hazard statements (GHS-US) : H318 - Causes serious eye damage
Precautionary statements (GHS-US) : P280 - Wear protective gloves/protective clothing/eye protection/face protection
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a poison center/doctor/...

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

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Name	Product identifier	%	GHS-US classification
Tetrapotassium pyrophosphate	(CAS No) 7320-34-5	1 - 5	Eye Irrit. 2A, H319
Alkyl polyglucoside C10-16	(CAS No) 110615-47-9	1 - 5	Skin Irrit. 2, H315 Eye Dam. 1, H318

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : If on skin, take off contaminated clothing. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Remove victim to fresh air. Assure fresh air breathing.
- First-aid measures after skin contact : Flush with plenty of water. Wash skin with plenty of water.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
- First-aid measures after ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
- Symptoms/injuries after skin contact : Repeated or prolonged skin contact may cause irritation.
- Symptoms/injuries after eye contact : Redness. Serious damage to eyes.
- Symptoms/injuries after ingestion : Abdominal pain, nausea.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : All extinguishing agents can be used. Water spray. Dry powder. Foam. Carbon dioxide.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not combustible.
- Explosion hazard : Product is not explosive.
- Reactivity : Stable under normal conditions of storage, handling and use.

5.3. Advice for firefighters

- Precautionary measures fire : Wear proper protective equipment.
- Firefighting instructions : Exercise caution when fighting any chemical fire.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Ensure adequate ventilation.

6.1.1. For non-emergency personnel

- Protective equipment : Personal protection. See Heading 8.2.
- Emergency procedures : Ventilate spillage area. Evacuate area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. See Heading 8.2. For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures : Mark out the contaminated area with signs and prevent access to unauthorized personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

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6.3. Methods and material for containment and cleaning up

- For containment : Dike for recovery or absorb with appropriate material.
- Methods for cleaning up : Take up liquid spill into absorbent material. Take up liquid spill into inert absorbent material, e.g.: sand, earth, vermiculite or kieselguhr. Dilute residue with water.
- Other information : Spill area may be slippery. Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Heading 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product. Avoid contact with skin and eyes. Wear personal protective equipment.
- Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep container closed when not in use. Store in a well-ventilated place. Keep cool.
- Storage temperature : 4 - 25 °C
- Heat and ignition sources : Store away from direct sunlight or other heat sources.
- Special rules on packaging : Keep only in original container.
- Packaging materials : PEHD.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters



Tetrapotassium pyrophosphate (7320-34-5)

Not applicable

Alkyl polyglucoside C10-16 (110615-47-9)

Not applicable

8.2. Exposure controls

- Appropriate engineering controls : Ensure adequate air ventilation. Ensure good ventilation of the work station.
- Personal protective equipment : Safety glasses. Gloves.
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- Hand protection : In case of repeated or prolonged contact wear gloves. (EN 134).
- Eye protection : Chemical goggles or safety glasses. Eye protection (standard EN 166). Safety glasses.
- Skin and body protection : Avoid contact with skin.
- Respiratory protection : No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation.
- Thermal hazard protection : Not applicable.
- Environmental exposure controls : Prevent entry to sewers and public waters. Avoid release to the environment. Avoid release to the environment.
- Other information : Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. The equipment must be cleaned thoroughly after each use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Colour : light yellow
- Odour : characteristic
- Odour threshold : Not established.

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pH	: 9.65 - 10.05
Melting point	: Not applicable
Freezing point	: Not tested
Boiling point	: Not tested
Flash point	: Not tested
Relative evaporation rate (butylacetate=1)	: Not tested
Flammability (solid, gas)	: Not applicable
Explosive limits	: No data available
Explosive properties	: Product is not explosive.
Oxidising properties	: Not applicable.
Vapour pressure	: Not tested
Relative density	: 1.01 - 1.11
Relative vapour density at 20 °C	: Not tested
Solubility	: Material highly soluble in water.
Log Pow	: Not tested
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not applicable
Viscosity	: No data available
Viscosity, kinematic	: Not tested
Viscosity, dynamic	: Not tested

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of storage, handling and use.

10.2. Chemical stability

Stable under normal conditions of storage, handling and use.

10.3. Possibility of hazardous reactions

None under normal conditions.

10.4. Conditions to avoid

None.

10.5. Incompatible materials

None, to our knowledge.

10.6. Hazardous decomposition products

Thermal decomposition may produce : Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Tetrapotassium pyrophosphate (7320-34-5)

LD50 dermal rabbit	> 4640 mg/kg
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Skin corrosion/irritation : Not classified
pH: 9.65 - 10.05

Serious eye damage/irritation : Causes serious eye damage.
pH: 9.65 - 10.05

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

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Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
Symptoms/injuries after skin contact	: Repeated or prolonged skin contact may cause irritation.
Symptoms/injuries after eye contact	: Redness. Serious damage to eyes.
Symptoms/injuries after ingestion	: Abdominal pain, nausea.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Alkyl polyglucoside C10-16 (110615-47-9)

LC50 fish 1	10 - 100 mg/l
Additional ecotoxicological information	EC0, microorganisms: > 100 mg/l

12.2. Persistence and degradability

Alkyl polyglucoside C10-16 (110615-47-9)

Persistence and degradability	Readily biodegradable.
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12.3. Bioaccumulative potential

FILZYM 230

Log Pow	Not tested
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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Remove to an authorized waste treatment plant. Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: May be discharged to wastewater treatment installation.
Waste disposal recommendations	: Dispose of contents/container to hazardous or special waste collection point. WHEN TOTALLY EMPTY, containers are recyclable like any other packing.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT
Not regulated for transport

TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

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SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Alkyl polyglucoside C10-16 (110615-47-9)

EPA TSCA Regulatory Flag

N - N - indicates a polymeric substance containing no free-radical initiator in its Inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used
P - P - indicates a commenced PMN substance

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Revision date : 02/17/2015

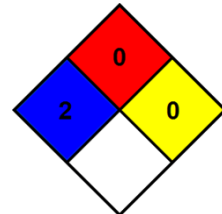
Full text of H-statements:

H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation

NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product